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Inspection Report for

Cochiti Community Development Corp. Cochiti Lake, NM



200KG Steel On-Grade Tank

Date Completed: November 10, 2016

Commercial Dive Team:

Diver –Mikel Hochleutner Dive Controller –Kyle Colvin Tender –Mack Thorell

Scope of Work:

Our team completed sediment removal using underwater vacuum equipment. Sediment depth, averaging 1 inch (sand, iron & manganese), was removed from the tank floor. When the cleaning process was finished, a full visual inspection was performed of the tank interior and all interior fixtures. The team also performed a full visual inspection of the tank exterior and all attached fixtures. The details of the inspection findings are included in the report below.

Summary of the Inspection:

Exterior Inspection

- 1. There was good access to the tank.
- 2. The ladder was found secure, OSHA approved and in good condition with oxidation noted.
- 3. The roof was found in good condition with low spots, oxidation, minor de-lamination and 3% surface corrosion noted.
- 4. The hatch was found locked with a partial gasket present and in good condition with minor de-lamination, oxidation and 5% corrosion noted. A new gasket was installed.
- 5. The wall was found in good condition with dents and oxidation noted.
- 6. The vent was found in good condition with oxidation and 3% surface corrosion noted and a screen in place.
- 7. The base of the tank was found in good condition.
- 8. The manway was found secure and in excellent to good condition.
- The float level indicator was found in poor condition with a broken pulley & cable and 5% surface corrosion noted.

Interior Inspection

- The inlet was found in good condition with 2% concentrated cell corrosion & rust noduling noted.
- 2. The outlet was found in good condition with rust noduling and 4% corrosion noted.
- 3. The ladder was found secure and in good condition with less than 1% concentrated cell corrosion & rust noduling noted and oil present.
- 4. The manway was found in good condition with heavy sediment staining and less than 1% concentrated cell corrosion & rust noduling noted.
- 5. The overflow was found in good condition with less than 1% surface corrosion noted and oil present.
- 6. The interior roof was found in good condition with less than 1% surface corrosion noted.
- 7. The interior wall was found in good condition with less than 1% concentrated cell corrosion & rust noduling noted and oil present on the upper section.
- 8. The support column was found secure and in good condition with less than 1% concentrated cell corrosion & rust noduling noted and oil present on the upper section.
- 9. The floor was found in good condition with pitting, sediment staining and 2% concentrated cell corrosion & rust noduling noted.
- 10. The float was found in good condition but one of the guidewires was not attached and there was 50% concentrated cell corrosion & rust noduling noted on the hardware.
- 11. The oil that is present appears to be a food based hydraulic oil commonly used to lubricate water pumps in potable water system and this oil is typically not harmful.

Recommendations:

- 1. Drain the tank and have it pressure washed to eliminate the oil as soon as budgets allow.
- 2. Schedule time for epoxy repairs to the problem areas in the tank. (Approximately 1 day)
- 3. Schedule time to clean and inspect every 3-5 years per AWWA recommendations.

Key

Excellent – Like new, no repairs needed Good – Cosmetic problems, repair if utility wants Fair – Minor problems, repairs needed Poor – Major problems, fix now



Inland Potable Services, Inc. <u>Exterior Inspection Report</u>



Access Ladder Condition

Ladder Type: Steel Coating Condition: Good Corrosion Present? Y \Boxed N \Boxed Seams/Welds Condition: Good Oxidation Present? Y \Boxed N \Boxed De-lamination Present? Y \Boxed N \Boxed Stand Off Supports Condition: Good Safety Climb Type: Cage Safety Climb Condition: Good Is Top Of Tank Easily Accessible? Y \Boxed N \Boxed Is Ladder and Safety Climb OSHA Approved? Y \Boxed N \Boxed Summary: The ladder was found secure, OSHA approved and in good condition with oxidation noted.		
Roof Condition		
Coating Condition: Good Corrosion Present? Y N N Percentage: 3% Seams/Welds Condition: Good Oxidation Present? Y N N De-lamination Present? Y N Low Spots Present? Y N Holes in Roof? Y N Cathodic Protection Plates Present? Y N Sealed Edges: Y N N N/A Loose Plates? Y N N/A Missing Plates? Y N N/A N Summary: The roof was found in good condition with low		
spots, oxidation, minor de-lamination and 3% surface corrosion noted.		
Access Hatch Condition		

Coating Condition: Good
Corrosion Present: Y N N
Seams/Welds Condition: Good
Oxidation Present? Y N N
De-lamination Present? Y N N
Hatch Size: 2 foot square
Hatch Locked? Y ⊠ N □
Hinge Condition: Good
Gasket Present? Y ⊠ N □
Intact? Y \Bigcap N \Bigcap N/A \Bigcap
Insects, Dirt Or Debris Present Under Hatch? Y \(\subseteq N \)
Summary: The hatch was found locked with a partial gaske present and in good condition with minor de-lamination,

oxidation and 5% corrosion noted. A new gasket was

installed.



Wall Panel Condition

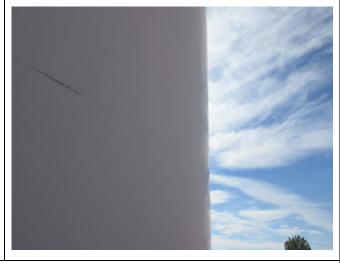
Coating Condition: Good Corrosion Present? $Y \square N \boxtimes$

Percentage: N/A

Seams/Welds Condition: Good Oxidation Present? $Y \boxtimes N \square$ De-lamination Present? $Y \square N \boxtimes$

Dents Present? $Y \boxtimes N \square$ Holes Present? $Y \square N \boxtimes$

Summary: The wall was found in good condition with dents and oxidation noted.



Vent Condition

Coating Condition: Good Corrosion Present: $Y \boxtimes N \square$

Percentage: 3%

Seams/Welds Condition: Good Oxidation Present? Y \boxtimes N \square De-lamination Present? Y \square N \boxtimes

Screen in Place? Y N

Condition: Good

All Openings Sealed? Y \boxtimes N \square Cap Condition: Good

Summary: The vent was found in good condition with oxidation and 3% surface corrosion noted and a screen in place.





Foundation Condition	
Foundation Exposed? Y \(\subseteq N \) \(\subseteq N \) Anchor Bolts Present? Y \(\supseteq N \) \(\supseteq N \) Anchor Bolts Present? Y \(\supseteq N \) \(N \) \(N/A \) Anchor Bolts Loose? Y \(\supseteq N \) \(N/A \)	257>
Cracking Noted In Foundation? Y ☐ N ☐ N/A ☒ Spalling Noted? Y ☐ N ☐ N/A ☒	
Summary: The base of the tank was found in good condition.	

Manway Condition

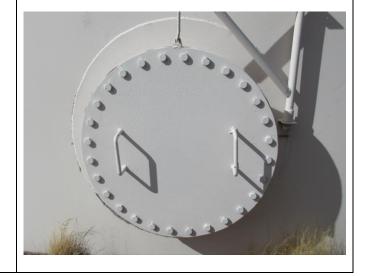
Coating Condition: Excellent Weld/Seam Condition: Good Corrosion Present? Y ☐ N ☒

Percentage: N/A
Pitting Noted In Metal? Y \(\subseteq \ N \\emptysee \)

Depth: N/A

Summary: The manway was found secure and in excellent

to good condition.



Float Level Indicator Condition

Pulley Condition: Poor

Attached Properly? Y □ N ☒

Cable Condition: Poor

Attached Properly? Y N N

Hardware Condition: Good

Corrosion Present? Y N N

Marker Condition: Poor

Attached & Accurate? $Y \square N \boxtimes$ Corrosion Present? $Y \boxtimes N \square$

Summary: The float level indicator was found in poor condition with a broken pulley & cable and 5% surface

corrosion noted.







Inland Potable Services, Inc. Interior Inspection Report



Inlet and Outlet Condition		
Common Inlet/Outlet? Y \Boxed N \Boxed Location: N/A If No: Inlet Location: 11:50 o'clock Coating Condition: Good Weld/Seam Condition: Good Corrosion Present? Y \Boxed N \Boxed Percentage: 2% Pitting Noted In Metal? Y \Boxed N \Boxed Depth: N/A Summary: The inlet was found in good condition with 2% concentrated cell corrosion & rust noduling noted.		
Common Inlet/Outlet? Y \Boxed N \Boxed Location: N/A If No: Outlet Location: 1 o'clock Coating Condition: Good Weld/Seam Condition: Good Corrosion Present? Y \Boxed N \Boxed Percentage: 4% Pitting Noted In Metal? Y \Boxed N \Boxed Depth: N/A Summary: The outlet was found in good condition with rust noduling and 4% corrosion noted.		
Ladder Condition		

Ladder Location: 12 o'clock
Coating Condition: Good
Weld/Seam Condition: Good
Supports Condition: Good
Corrosion Present? Y N Percentage: less than 1%
Pitting Noted In Metal? Y N N

Depth: N/A

Summary: The ladder was found secure and in good condition with less than 1% concentrated cell corrosion & rust noduling noted and oil present. It appears to be a food based hydraulic oil commonly used to lubricate water pumps in potable water system and this oil is typically not harmful.



Manway Condition

Manway Location: 3 o'clock
Coating Condition: Good
Weld/Seam Condition: Good
Corrosion Present? Y N Percentage: less than 1%

Pitting Noted In Metal? Y ☐ N 🖂

Depth: N/A

Summary: The manway was found in good condition with heavy sediment staining and less than 1% concentrated cell corrosion & rust noduling noted.



Overflow Condition

Overflow Location: 12:30 o'clock

Coating Condition: Good
Weld/Seam Condition: Good
Corrosion Present? Y ⊠ N ☐
Percentage: less than 1%

Pitting Noted In Metal? Y N N

Depth: N/A

Summary: The overflow was found in good condition with less than 1% surface corrosion noted and oil present. It appears to be a food based hydraulic oil commonly used to lubricate water pumps in potable water system and this oil is typically not harmful.



Roof Condition

Coating Condition: Good Welds/seam Condition: Good

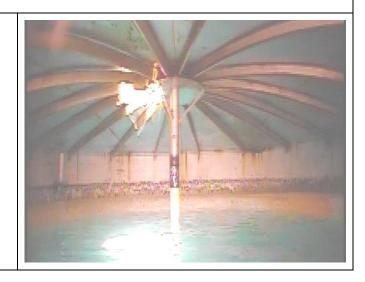
Corrosion Present On Panels? Y X N

Percentage: less than 1%

Metal De-alloying Noted? Y ☐ N 🔀

Percentage: N/A

Summary: The interior roof was found in good condition with less than 1% surface corrosion noted.



Wall Panel Condition

Coating Condition: Good Welds/seam Condition: Good

Corrosion Present On Panel? Y X N

Percentage: less than 1%

Pitting Noted In Metal? Y N N

Depth: N/A

Summary: The interior wall was found in good condition with less than 1% concentrated cell corrosion & rust noduling noted and oil present. It appears to be a food based hydraulic oil commonly used to lubricate water pumps in potable water system and this oil is typically not harmful.





Support Column Condition

Coating Condition: Good
Welds/seam Condition: Good
Corrosion Present? Y N Percentage: less than 1%

Pitting Noted In Metal? Y N N

Depth: N/A

Summary: The support column was found secure and in good condition with less than 1% concentrated cell corrosion & rust noduling noted and oil present. It appears to be a food based hydraulic oil commonly used to lubricate water pumps in potable water system and this oil is typically not harmful.



Floor Condition

Coating Condition: Good Welds/seam Condition: Good Corrosion Present? Y ⊠ N □

Percentage: 2%

Pitting Noted In Metal? Y ⊠ N □

Depth: 1/16 inch

Summary: The floor was found in good condition with pitting, sediment staining and 2% concentrated cell

corrosion & rust noduling noted.







Float Condition

Guidelines Condition: Fair

Attached Properly? Y \(\subseteq \) N \(\subseteq \)

Cable Condition: Poor

Attached Properly? Y \(\subseteq \) N \(\subseteq \)

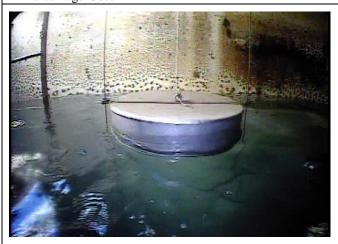
Hardware Condition: Fair

Corrosion Present? Y X N

Percentage: 50%

Float Condition: Good

Summary: The float was found in good condition but one of the guidewires was not attached and there was 50% concentrated cell corrosion & rust noduling noted on the hardware.





Lower connection

